ATTACHMENT A

BACKGROUND INFORMATION ON COSTS OF NITRATE-RELATED COMMUNITY DRINKING WATER INFRASTRUCTURE

This section provides further detail on some of the cost data presented in the main body of this report. It also describes how these data were derived. The following topics are considered here:

- Costs of nitrate-related infrastructure vs. all public water system infrastructure
 - Estimated costs of all public water system projects approved in 1996 and 1997 vs. nitrate-related projects
 - 1995 drinking water infrastructure needs inventory—Nebraska
 - Future costs of other contaminants
- Estimated economic costs of addressing nitrate-related small community water system problems since 1981
- Rough estimated cost of improvements for small communities receiving Administrative Orders
- Economic and social costs to self-supplied domestic users
- Methodology for developing cost estimates

COSTS OF NITRATE-RELATED INFRASTRUCTURE VS. ALL PUBLIC WATER SYSTEM INFRASTRUCTURE

Estimated Costs of All Public Water Supply Projects Approved in 1996 and 1997 vs. Nitrate-Related Projects

A number of factors may lead to a community's decision to expand its water supply infrastructure. Increased demand, changes in water quality, changes in water quality standards, decay of existing infrastructure, or depletion of supply can all affect infrastructure needs. In turn, water demand may be altered by increasing or decreasing population, the needs of various industries, water rates, or water conservation efforts.

Plans and specifications for all major public water supply system construction or alteration in Nebraska must be submitted to the Nebraska Health and Human Services System (HHSS) for review and approval prior to contracting or construction. A review fee for those projects is based in part upon the engineer's estimate of the cost of the project.

For the period of January 1, 1996, to December 31, 1997, HHSS received project review fees from 301 separate water systems of all sizes. Based upon the fees submitted, those projects had a total estimated cost of \$39,621,782. An analysis for this study indicates that the 10 systems whose projects appeared to be at least partially related to nitrate problems accounted for about \$3,486,190 or about 8.8% of the estimated project costs. Although the estimated costs for projects approved do differ from those for project applications received, that difference is small. All figures were calculated using the preproject engineers' estimates submitted with the applications. In many cases, these were considerably lower than the amounts supplied by communities that responded to a subsequent survey (see "Methodology" section at end of this appendix) or the amounts shown in Community Development Block Grant files. In addition, two major projects proposed during the 1996-97 study period were begun after 1997 and were not included in this amount. Thus, the total expenditure of over \$8 million in projects applied for in 1996 is about double the amount indicated in the tables used to derive the above figures.

Much of the total cost expended by water systems is for water mains. A total of 202 of the 301 projects included water mains. If only projects in which a community put in a new well are considered, a different picture emerges. HHSS files indicate that community water system projects approved in 1996 and 1997 involving new wells included construction of 61 wells and 5 treatment plants as well as expenditures for storage facilities, water mains and other improvements. Nitrate-related small city, village, and rural water system projects accounted for about 16 of the 61 wells and one treatment project.

Table A1 presents a combined summary of all projects received for HHSS review in calendar years 1996 and 1997.

Table A1.—Public Water Supply Projects Received* for HHSS Review, Calendar Years 1996 and 1997

301
298
55
302
9
20
4
25

^{*}Note: Figures for projects received may differ from those for projects approved.

1995 EPA Drinking Water Infrastructure Needs Survey—Nebraska Data

In 1997, the U.S. Environmental Protection Agency estimated monetary costs of future water system infrastructure needs in a variety of categories by state (EPA, 1997). For Nebraska, it estimated costs just for complying with the nitrate provisions of the Safe Drinking Water Act (SDWA) at \$8.4 million (in 1995 dollars) over the following 20 years. That ranked Nebraska fourth in the nation in nitrate-related needs, following California, Illinois, and Oklahoma. (California accounted for \$172 million of the nation's \$273.7 million in nitrate-related infrastructure needs.)

The \$8.4 million of Nebraska infrastructure needs to address nitrate represents less than 5% of the state's total SDWA-related needs expected over the ensuing 20 years (\$184.1 million) and is considerably under the rough estimates for nitrate-related infrastructure this report has generated for the 1981–97 time period. It also represents less than 1% of Nebraska's total 20-year drinking water infrastructure need of \$952.9 million. However, it should be noted that "needs" are higher than current expenditures on infrastructure. At \$472.2 million, small systems (serving fewer than 3,300 in the EPA study) accounted for nearly half of Nebraska's 20-year infrastructure needs. Nebraska-related data from the EPA study are presented in Table A2. The nationwide survey was compiled from sample communities in each state. The data for Nebraska came from 36 sample communities.

Future Costs of Other Contaminants

Nitrate accounted for nearly half (34 out of 69) of the water quality violation administrative orders issued from 1991 through 1997. Future changes in EPA standards for various other contaminants or properties may mean that nitrate will account for a smaller proportion of administrative orders, even if the actual number of nitrate-related administrative orders were to remain the same. Changing requirements for lead, copper, arsenic, radon, and, conceivably, mandatory disinfection may result in the need for system improvements in some small communities.

For instance, as of March 1999, 56 Nebraska community water systems had exceeded the EPA action level for copper of 1.3 mg/L. This high number of exceedances was occasioned by EPA's adoption of new requirements rather than by rising copper levels in the systems. Although the 1995 EPA infrastructure needs inventory estimated the 20-year cost of compliance with the lead and copper rule at only \$4.3 million, there is reason to believe that may be a substantial underestimate. For instance, it has been estimated that the rule will cost the City of Hastings alone \$1 million in water treatment equipment initially plus \$250,000 per year. It seems likely that this new requirement and other potential requirements (such as mandatory disinfection) could substantially increase infrastructure costs for small Nebraska communities.

Table A2 Nebraska-Related Data From EPA's Drinking Water Infrastructure Needs Survey (EPA, 1997)

(In Millions of January 1995 Dollars; n.a. = not available)

Category	Current Need	Total 20- year need
By infrastructure category: Transmission & distribution Treatment Storage Source Other Total	254.8 176.7 48.2 69.8 0. 549.5	471.3 306.4 78.1 90.7 <u>6.3</u> 952.9
By system size: Large systems (more than 50,000 people) Medium systems (3,301 to 50,000 people) Small systems (3,300 or fewer people) Total	n.a. n.a. <u>n.a.</u> 549.5	230.6 250.1 472.2 952.9
Safe Drinking Water Act (SDW	A) Needs	
Existing regulations: Surface water treatment rule Total coliform rule Nitrate standard Lead and copper rule Phase I, II, & V chemical contaminants Total trihalomethane standard Other standards Subtotal	156.1 1.1 8.4 2.3 1.1 0 0.2 169.2	168.7 1.4 8.4 4.3 1.1 0 0.2 184.1
Proposed rules: Disinfection and disinfection byproducts Enhanced surface water treatment rule Information collection rule Subtotal	0 0 0 0	33.0 7.2 <u>0.1</u> 40.3
SDWA-related distribution system needs	0	262.9
Total SDWA and SDWA-related needs	169.2	487.3

ESTIMATED ECONOMIC COSTS OF ADDRESSING NITRATE-RELATED **COMMUNITY WATER SYSTEM PROBLEMS SINCE 1981**

Data from multiple sources were combined with the results of a survey of Nebraska communities believed to have made nitrate-related expenditures in order to compile a rough estimate of economic costs since 1981.

As of 1997, Nebraska had 608 community water supply systems that served fewer than 10,000 people. Records indicate that, since 1981, at least 59 Nebraska small city, village, or

rural water systems have improved or are improving their water systems. The total cost of current and completed projects that are at least partially nitrate related is estimated to be over \$24 million.

The available data may not be comprehensive, so it's possible that a few system improvements were overlooked. Also, some projects were omitted because it was not clear whether they were nitrate related. Therefore, the above estimates are probably understated.

On the other hand, determining which projects are nitrate related is tricky, and this difficulty could have resulted in an overstatement. Available files generally do not characterize a project as "nitrate related." Nitrate may be only one of the factors that led to a community's decision to upgrade its water system. When a system is upgraded, some features of the project may have little to do with nitrate. For purposes of this summary, wherever nitrate appeared to be at least one of the major reasons for a project, all project costs were included in the data.

Table 3 in the main report lists cities and villages that have made or are making water system improvements that appear to be at least partly nitrate related. Figure 5 shows the location of these communities, and table 2 summarizes the overall costs of the projects. Because some of the costs shown there are preconstruction engineers' estimates from HHSS files, amounts may vary from final project costs. Estimates also were used for final costs for projects underway but not yet completed. It is possible that a few communities were overlooked in this compilation.

For communities that built water treatment systems in response to nitrate problems, significant ongoing maintenance costs would push overall cost figures higher. In addition, some communities that had nitrate violations must bear the increased cost of sampling on a quarterly basis. Communities that exceed a 5-mg/L monitoring trigger at their point of entry must sample on a quarterly basis until readings have been under 8 mg/L for four consecutive quarters. As of January 1998, it cost \$18.10 to have a sample analyzed for nitrate nitrogen by HHSS.

Nitrate-related costs are greatest for communities that have had to install water treatment systems to reduce nitrate levels. Keefer and Lamberty (1995) noted that as of that time "only 44 of the 425 towns with wells treat their drinking water; 28 disinfect, 5 treat for nitrates, and 21 remove iron and manganese." Most (282) of those towns had multiple wells but no common distribution system. The costs of going to treatment, whether for nitrate or other causes, can be very high for such communities, much higher than the cost of only drilling a new well.

Available data seem to indicate that, since 1981, seven Nebraska small cities or villages have built or undertaken nitrate-related projects that include new water treatment facilities. The cost of that infrastructure was about \$6,933,512. These seven communities constitute about 12% of the 59 total communities that have made or are making nitrate-related drinking water infrastructure improvements. However, they account for about 28% of the costs of nitrate-related infrastructure improvement over that period. Treatment facilities generally also have substantial operation and maintenance costs.

Nitrates are likely to continue to be a significant issue to communities. The Nebraska Mandates Management Initiative provides a specific case in point. That program is administered

by the Department of Environmental Quality and has delivered direct technical assistance on infrastructure problems to a range of communities. Of the 83 communities that participated fully in the program between May 1995 and January 1998, 42 identified nitrate concerns as an important issue. Sixteen of these communities had received an administrative order for nitrate at some point since 1981 (DEO, 1998).

Although the above infrastructure costs are high, they were not all paid by the water systems or consumers. Community Development Block Grants and grants and loans from the U.S. Department of Agriculture accounted for much of that cost. An analysis of water rates for some of the affected communities revealed that communities which had addressed infrastructure problems due to nitrate had only marginally higher rates than other communities. (See Table 4 in the main text.)

ROUGH ESTIMATED COST OF IMPROVEMENTS FOR SMALL COMMUNITIES RECEIVING ADMINISTRATIVE ORDERS

When a system is significantly out of compliance with nitrate standards, HHSS issues an administrative order. It will do so, for instance, whenever a community has two nitrate MCL violations in a nine-month period. Failure to comply with the terms of the administrative order can result in action to revoke the system's permit to operate. Between 1991 and 1997, nitrate accounted for 34 of the 69 administrative orders issued for violations of water quality standards (49%). Since 1981, about 62 Nebraska community water systems serving fewer than 10,000 people have received a total of about 74 administrative orders related to nitrate contamination; 41 of those systems have subsequently made or are making some type of nitrate-related improvements to their systems. Completed improvements accounted for about 51 new wells, 68,111 feet of pipe and 752,000 gallons of storage. Six communities had completed adding treatment systems in whole or in part in response to nitrate-related administrative orders.

Forty-five small city, village, and rural water systems accounted for 57 of the 74 administrative orders issued. Other administrative orders went to small independent systems. Of the 41 community systems that upgraded their infrastructure in response to administrative orders, 36 were small city, village, and rural water systems. Those accounted for \$11,283,298 (47%) of the total \$24,225,014 cost of improvements by small city and village systems.

ECONOMIC COSTS TO SELF-SUPPLIED DOMESTIC USERS

Customers of public water supply systems are not the only people affected by the costs of responding to nitrate-related contamination. Gosselin et al. (1997) sampled 1,808 private domestic wells in 1994-95 and found that approximately 19% of the wells sampled were over the Federal MCL for nitrate nitrogen. In 1990, an estimated 110,754 households were supplied by individual domestic water wells (Gosselin et al. 1997). The NNRC (1998) estimates that about 21% of Nebraskans were served by self-supplied domestic water in 1995. Because the wells selected for the Gosselin et al. study were from residences where occupants were actively engaged in farming and/or occupied at least 6 acres of land, the samples may not accurately

reflect all private wells. In general, it seems that smaller, nonagricultural plots are more likely to have newer wells or to have wells that had to be improved during a change of ownership. However, they may also be in more heavily populated areas and possibly more subject to septic tank contamination. Private well use is expanding in the rural areas around Lincoln, Omaha, and Grand Island.

Whatever conclusions are drawn about the level of health risk posed by the nitrate levels reported by Gosselin et al. (1997), their findings do indicate the potential for nitrate-related expenditures by owners of some private domestic wells. Increased well depth and grouting are a likely solution to many domestic well problems. The cost of deepening a single private domestic well is in the range of \$1,200 to \$1,500, and the cost of replacing a well, including pump and pipe, probably averages \$3,000 to \$4,000. Given those averages, the costs of bringing all wells into compliance could be very high. It is likely that many individual well owners would seek to avoid such an expense. Inasmuch as the nitrate MCL is set at a level believed to protect the health of pregnant women and infants, some families that do not include such high-risk individuals might believe they can afford to exceed the MCL. Some may also find other options, such as point-of-use treatment, more affordable. No survey was done of how many rural domestic well owners with high nitrates are using point-of-use treatment. (One community which examined this option found that the systems would cost each household about \$400 to install, \$65 to \$90 in annual maintenance, and \$22 in annual testing fees.) Equipment costs can also run higher than \$400, into the range of \$500 to \$1,500 in some instances. Many rural domestic well owners with high nitrates are using point-of-use treatment (which costs in the range of \$100 to \$400). Alternatives for self-supplied rural domestic water users are discussed elsewhere in this report.

The percent of rural domestic water users who test their water and have an idea of nitrate levels is not known. Data from a nine-state 1994 survey of 5,520 private well users by the Centers for Disease Control (CDC 1996) show that about 44% of those responding said their wells had never been tested for contamination, 44% said theirs had been, and 11% did not know. That study included Nebraska. However, nitrate is among the easier and more common contaminants to test for, and Nebraskans' awareness of nitrate problems may make testing more common in the state.

As of 1995 there were 59 Nebraska towns that had no public water systems. In addition, many unincorporated developments also lack public water supplies. The proximity of septic tanks and wells in a concentrated space is of concern in some of these areas. In many cases the older domestic wells may not be as well sited or constructed as a community well would be. At least one small town was installing its first community water system as this report was being written. Other concentrations of residences without a public water supply are potential candidates for adoption of a community water system.

METHODOLOGY FOR DEVELOPING COST ESTIMATES

For this study, cost estimates of nitrate-related infrastructure expenditures between 1981 and 1997 were developed from a Natural Resources Commission survey of communities from

HHSS data, and from Community Development Block Grant data. The data include estimated final expenditures for projects still underway.

Plans and specifications for all major public water supply system construction or alteration must be submitted to HHSS for review and approval prior to contracting or construction. An initial review fee for those projects is based in part upon the engineer's estimate of the cost of the project. A final review fee is later based on final project costs. Records from initial reviews made in 1996 and 1997 were used to ascertain how estimated expenditures approved for nitrate-related projects compared to those for overall public water system infrastructure projects. Similarly, those records were used in summarizing nitrate-related small community water system expenditures since 1981.

The challenge in using the project records was twofold: (1) determining which expenditures were nitrate related and (2) determining the total expenditures on a project. Although not completely successful, several methods were used to address the first question. HHSS computer databases were screened to see which community water systems had received administrative orders for nitrate or had received at least one nitrate sample reading above 5 mg/L since 1981. Then HHSS paper files for the identified community systems were examined to determine the type of project, the estimated project cost, and any information on whether the project was nitrate related.

That information did not always reveal whether a project was constructed primarily in response to nitrate. Most community water systems identified as having made nitrate-related expenditures were cross-checked with Community Development Block Grant files to ascertain total project expenditures for any projects funded by those grants. Finally, questionnaires were sent to all communities identified as having made or possibly having made nitrate-related water system improvements since 1981. Those questionnaires asked the water system operators to confirm whether the improvements were nitrate related and to correct the cost figures if necessary. A copy of the questionnaire and one of three cover letters are shown on the following pages.

In those communities that had received an HHSS administrative order to deal with nitrate immediately, subsequent projects were deemed nitrate related unless a returned survey declared otherwise. The communities that undertook infrastructure construction in response to an administrative order were easiest to identify. Those that had responded to nitrate prior to receiving an administrative order were harder to identify.

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To: Selected Community Water System Contacts:

Our agency is developing a rough summary of community expenditures on water system
improvement projects since 1981 that were at least partially related to nitrate in community water
supplies. We are unsure of the validity of some of our data. Our information indicates that in
the City/Village of submitted project plans to make water system
improvements which ultimately had or will have an approximate total cost (including grant or
loan money) of Our available data does not indicate with certainty whether or not
nitrate levels in the community's wells prior to that time were one of the major reasons for the
project.

We would appreciate having you fill in and return the enclosed form to let us know whether nitrate was a major factor. If you can easily access the data, we would also appreciate your confirmation on whether the expenditure figure we have provided is approximately correct. A stamped self addressed envelope is enclosed. If possible, we would appreciate your response within the next two weeks. If you have any questions, please feel free to call me at (402) 471-3955. Thank you for any assistance you are able to provide.

Sincerely,

Steve Gaul Head, Comprehensive Planning Section

Enclosure

Return to:	
Nebraska Natural F P.O. Box 94876 Lincoln, Nebraska	Resources Commission 68509-4876
Name of Commu	unity
(Yes/No)	Was nitrate one of the major reasons your community initiated the water supply improvement project mentioned?
(Yes/No)	Is the approximate total cost of the project?
	If the above amount is incorrect, we would appreciate receiving a correct expenditure figure for the project, if possible. Actual Total Cost
Othe	r Information:
Note: Then	k vou for any information you are able to provide

ATTACHMENT B

SELECTED SOURCES OF TECHNICAL ASSISTANCE AND EDUCATION RELEVANT TO COMMUNITY WATER SUPPLIERS AND SOURCE-WATER PROTECTION

NEBRASKA

Nebraska Health & Human Services System Dept. of Regulation and Licensure P.O. Box 95007 Lincoln, NE 68509-5007

(402) 471-2541

Information and technical assistance on public water systems including inspection/findings, evaluation of proposed well locations, providing technical guidance to engineers, education and certification programs for operators, on-site technical assistance and infrastructure needs assessment.

Nebraska Dept. of Environmental Quality

P.O. Box 98922 (402) 471-2186 Lincoln, NE 68509-8922 FAX (402) 471-2909

Administers the Nebraska wellhead protection program and the Nebraska Mandates Management Initiative, each of which provides extensive assistance to small communities. Also provides education and technical assistance on wastewater facilities and septic tanks and field assistance on contamination problems.

University of Nebraska-Lincoln Conservation & Survey Division 113 Nebraska Hall University of Nebraska-Lincoln Lincoln, NE 68588-0517

(402) 472-3471

Evaluates proposed location of water wells, repository of geologic information.

Nebraska Rural Water Association 555 Commercial Park Road Wahoo, NE 68066

(402) 443-5216

(402) 443-5274 FAX

Gathers and provides information on water system rates, provides on-site technical assistance, assists infrastructure assessment, promotes model ordinances and provides personnel to assist with wellhead protection programs.

Midwest Assistance Program
(Rural Community Assistance Program)
P.O. Box 4D (402) 846-5123
Walthill, NE 68067 (402) 846-5152 FAX

Helps communities assess infrastructure needs and evaluate water rates - provides assistance to communities on writing Community Development Block Grant and Final Economic Development Administration Grant Fund applications.

American Water Works Association Nebraska Chapter

Nebraska League of Municipalities 1335 L Street Lincoln, NE 68508

(402) 476-2829

Promotes model water ordinances and assists with water operator training and on-site technical assistance.

The Groundwater Foundation
P.O. Box 22558 (402) 434-2740
Lincoln, NE 68542 (402) 434-2742 FAX

Operates the National Groundwater Guardian Program, an education and recognition program to help communities to protect their groundwater resources. Groundwater Guardian relies on voluntary steps developed at the community level.

Nebraska Association of Resources Districts 601 S. 12th, Suite 201 (402) 474-3383 Lincoln, NE 68508 (402) 474-0919 FAX

University of Nebraska-Lincoln - Cooperative Extension Program 211 Agricultural Hall University of Nebraska-Lincoln Lincoln, NE 68583

Education, information and demonstrations on a wide variety of agricultural and water related topics. The Cooperative Extension web site can be found at http://www.ianr.unl.edu/ianr/Coopext/Coopext.htm .

University of Nebraska-Lincoln - Water Center 103 Natural Resources Hall (402) 472-3305 University of Nebraska-Lincoln Lincoln, NE 68583-0844

Contact for University of Nebraska Water Research

Nebraska Rural Development Commission 301 Centennial Mall South (402) 471-6002 P.O. Box 94666 Lincoln, NE 68509-4666

Fosters sustainability and economic development initiatives in rural areas.

NATIONAL

Environmental Protection Agency Region VII 726 Minnesota Avenue Kansas City, KS 66101

Information on water quality standards, system management, and operations.

The EPA Safe Drinking Water Hotline 1-800-426-4791

Current information regarding EPA's drinking water regulations and policies - also mails EPA drinking water publications.

The American Water Works Association 6666 W. Quincy Avenue (303) 794-7711 Denver, CO 80235

A scientific and educational organization that sponsors conferences/workshops on drinking water topics and develops publications on waterworks. Their small systems program provides information, technical assistance and training to small systems.

The Rural Community Assistance Program 602 South King Street, Suite 402 (703) 771-8636 Leesburg, VA 22075

Regional affiliates provide training and technical assistance on water, wastewater and solid waste projects. Offers publications on water system planning and operations and management.

The National Drinking Water Clearinghouse P.O. Box 6064 1-800-624-8301 Morgantown, WV 26506-6064

Offers financial and technical information for communities of 10,000 people and under. Also researches and answers questions, maintains a computer database, and offers technical products.

The Environmental Quality Instructional Resources Center **Ohio State University** (614) 292-6717 1200 Chambers Road, Room 310 Columbus, OH 43212-1792

Provides information on system design, operation and management including training manuals and audio-visual materials.

U.S. Dept. of Agriculture **Natural Resources Conservation Service -State Conservationist's Office** (402) 437-5300 152 Denney Federal Building 100 Centennial Mall North Lincoln, NE 68508-3866

Provides technical assistance to farmers, ranchers and other landowners to conserve and protect natural resources.

U.S. Geological Survey **Water Resources Division** Federal Building, Room 406 100 Centennial Mall North Lincoln, NE 68508

(402) 437-5082

Provides geologic information.

ATTACHMENT C

SELECTED SOURCES OF FUNDING RELEVANT TO COMMUNITY WATER SUPPLIES AND SOURCE-WATER PROTECTION

WATER SYSTEMS

Nebraska Health and Human Services System
Department of Regulations and Licensure
P.O. Box 95007
Lincoln, NE 68509-5007

(402) 471-2133

Administers the State revolving loan fund portion of the Safe Drinking Water Act.

U.S. Department of Agriculture Rural Utilities Service 308 Denney Federal Building 100 Centennial Mall North Lincoln, NE 68508

(402) 437-5551

Administers loans and grants to develop water and waste disposal systems in rural areas and towns.

Nebraska Department of Economic Development P.O. Box 94666 (402) 471-3111 Lincoln, NE 68509-4666

Administers Community Development Block grants which are used for water system infrastructure in some small communities.

SOURCE-WATER PROTECTION

Nebraska Health & Human Services System
Department of Regulation and Licensure
P.O. Box 95007
Lincoln, NE 68509-5007

(402) 471-2133

Has the option to allocate a portion of the State Drinking Water Revolving Fund to source water protection.

Nebraska Department of Environmental Quality P.O. Box 98922 (402) 471-2186 Lincoln, NE 68509-8922

Administers Section 319 non-point-source pollution grants (funded under section 319 of the Clean Water Act) as well as other water-quality-related funds.

Nebraska Environmental Trust 2200 N. 33rd Street P.O. Box 30370 Lincoln, NE 68509-0370

Trust fund can be used "for the purpose of conserving, enhancing, and restoring the natural, physical and biological environment of the state."

Nebraska Natural Resources Commission P.O. Box 94876 Lincoln, NE 68509-4876

(402) 471-2081

Administers various water-supply-related funds, including the Nebraska Resources Development Fund for water projects; the Small Watersheds Flood Control Fund; the Soil and Water Conservation Fund for agricultural measures; the Water Well Decommissioning Fund; and the Natural Resources Enhancement Fund, which can be used for water quality incentives. Projects financed through the Nebraska Resources Development Fund or the Small Watersheds Flood Control Fund may be sponsored by a local Natural Resources District or by a community, a public water system, an irrigation district, or some similar public entity. The other funds named above are distributed only through the NRDs. The NNRC also maintains a Natural Resources Data Bank and cooperated in the compilation of this report. The commission's Internet address is http://www.nrc.state.ne.us.

U.S. Dept. of Agriculture **Natural Resources Conservation Service State Conservationist's Office** (402) 437-5300 **152 Denney Federal Building** 100 Centennial Mall North Lincoln, NE 68508-3866

Administers the Environmental Quality Incentives Program.

U.S. Dept. of Agriculture Farm Service Agency 7131 A Street P.O. Box 57975 Lincoln, NE 68505-7975

(402) 437-5581

Administers a Water Quality Incentives Program for farmers. Also administers the Conservation Reserve Program that provides cost share for lands taken out of crop production including extra cost share for lands in wellhead protection areas.

Nebraska Association of Resources Districts 601 South 12th Street, Suite 201 (402) 474-3383 Lincoln, NE 68508 (402) 474-0919 FAX

The Nebraska Association of Resources Districts is a contact for Nebraska's 23 local natural resources districts. Those districts supply local matching conservation funds and sometimes help administer other funds or grants dealing with source water protection.

ATTACHMENT D

COMMON WATER/WASTEWATER PREAPPLICATION DEVELOPED THROUGH NEBRASKA MANDATES MANAGEMENT INITIATIVE

General Requirements - Applicants anticipating the use of federal and/or state administered funds to finance water or sanitary sewer system improvements must complete and submit an original and five (5) copies of the preapplication, consisting of the attached two page form and a preliminary engineering report, to <u>one</u> of the Water Wastewater Advisory Committee (WWAC) agencies. The WWAC agencies include:

Rick Bay
Department of Environmental Quality
1200 N Street, Suite 400
P O Box 98922
Lincoln, NE 68509-8922

Subhash Jha
Department of Health and Human Services
Regulations and Licensure
301 Centennial Mall South
P.O. Box 95007
Lincoln, NE 68509-5007

Rick Zubrod Department of Economic Development 301 Centennial Mall South P.O. Box 94666 Lincoln, NE 68509-4666

Denise Brosius Meeks USDA Rural Development Federal Building, Room 152 100 Centennial Mall North Lincoln, NE 68508

Review Procedure - Each preapplication will be reviewed by the WWAC as follows:

- 1. An original preapplication and five (5) copies are submitted to one of the WWAC agencies.
- 2. On receipt, agency distributes copies to the other WWAC members.
- 3. The WWAC will review the preapplication within 30 to 60 days after the submission.
- 4. Following its consideration, the WWAC will reply to the applicant by letter. For a suitable preapplication, the WWAC will recommend the preapplication be accepted and outline the logical funding sources to whom a full application should be submitted. The WWAC may, in the same or separate letter, list pertinent comments regarding technical, operational, or financial aspects of the projects. Substantive comments by the WWAC must be resolved before an application can be recommended for acceptance. Each agency on the WWAC will receive a copy of any WWAC correspondence.
- **5.** Each funding agency will follow its own full application process. Applicants seeking funding for the same project from multiple agencies must submit a full application to the particular agencies.
- 6. If a full application varies significantly from the preapplication, or if the facts involving a project have changed such that the feasibility of the proposed solution warrants further investigation, any individual WWAC agency may request the full WWAC review the project again.
- 7. Assistance will be recommended only to the extent necessary to complete project activities over and above private/local efforts, and for solutions considered appropriate and feasible by the WWAC.

WATER/WASTEWATER PREAPPLICATION FOR STATE AND/OR FEDERAL ASSISTANCE

Legal Applicant (City, County, SID):	
Representative/Title:	Employer ID#:
Address:	
City/Zip Code:	
Telephone/Fax:	
County:	
Preapplication Preparer:	
Address:	
City/Zip Code:	
Telephone/Fax:	
Engineering Firm:	
Engineering Consultant:	
Address:	
City/Zip Code:	
Telephone/Fax:	
Description of Need:	

(Please attach any reports or facilities plans which have been completed to date)

programs you are considering:	use meters (circle one		project type:
DED-CDBG USDA-RD DEQ-SRF DOH-SRF Other	Overage charges _ Metered Sewer Rates _	es/mo /mo for gallons	Drinking water Wastewater Both
COST CLA	ASSIFICATION	ESTIMATE	ED TOTAL COST
1. Administrative and legal	expenses		
2. Land, structures, right-o	f-ways, appraisals, etc.		
3. Relocation expenses an	nd payments		
4. Architectural and engine	eering fees		
5. Project inspection fees			
6. Site work, demolition an	d removal		
7. Construction			
8. Equipment			
9. Miscellaneous			
10 SUBTOTAL (sum of lin	nes 1-9)		
11. Contingencies			
12. SUBTOTAL			
13. Less project (program)	income		
14. TOTAL PROJECT CO	STS		
		that the information contained omplete to the best of my know	
Applicant Signature:		Date:	
Preapplication Preparer Si	anature:	Date:	